

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1.-5. (Cancelled)

6. (Currently amended) A method of identifying an agent that activates TSA-responsive Sp3-mediated transcription, the method comprising:

providing a mammalian cell in vitro having

(a) a first vector comprising a first regulatory sequence operably linked to a nucleic acid sequence encoding a fusion protein, wherein the fusion protein comprises:

(i) a fragment of human Sp3 (1) having transcriptional activation activity, and (2) comprising at least one glutamine rich region of a TSA responsive domain of human Sp3, and (3) lacking wherein at least amino acids 495-517, 525-547, and 555-575 of the Sp3 Zinc finger region are lacking from said fragment of human Sp3, and

(ii) a DNA binding domain of a heterologous protein; and

(b) a second vector comprising a target binding sequence for the DNA binding domain of the fusion protein operably linked to a reporter gene;

contacting the cell with a test agent; and

selecting a test agent that increases the expression of the reporter gene compared to a control.

7. (Previously presented) The method of claim 6, wherein the heterologous protein is not endogenous to the cell.

8. (Previously presented) The method of claim 7, wherein the heterologous protein is GAL4, LexA or tetracycline repressor.

9. (Previously presented) The method of claim 6, wherein the reporter gene encodes luciferase, chloramphenicol acetyltransferase, beta-galactosidase, human growth hormone or secreted alkaline phosphatase.

10. (Previously presented) The method of claim 8, wherein the reporter gene encodes luciferase, chloramphenicol acetyltransferase, beta-galactosidase, human growth hormone or secreted alkaline phosphatase.

11.-13. (Cancelled)

14. (Previously presented) The method of claim 6, wherein the second vector comprises a second regulatory sequence operably linked to the reporter gene.

15. (Previously presented) The method of claim 8, wherein the second vector comprises a second regulatory sequence operably linked to the reporter gene.

16. (Previously presented) The method of claim 9, wherein the second vector comprises a second regulatory sequence operably linked to the reporter gene.

17. (Previously presented) The method of claim 6, wherein the test agent is a low molecular weight compound.

18.-26. (Cancelled)

27. (Previously presented) The method of claim 6, wherein the Sp3 is human Sp3.

28. (Previously presented) The method of claim 6, wherein the fusion protein comprises at least one of the two glutamine-rich regions comprising amino acids 10-123 or 223-358 of human Sp3.

29. (Cancelled)